

LTH - Hypothyroidism

LTH-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will have a basic understanding of the anatomy and physiology of the pituitary-thyroid axis.

STANDARDS:

1. Explain the normal location, function, and feedback mechanism of the pituitary-thyroid axis (heart rate, muscle strength, bowel function, fat metabolism, energy level, hair growth, and mood).
2. Discuss the changes to the thyroid gland and the body's metabolic state as a result of hypothyroidism.
3. Discuss the impact of these changes on the patient's health and well-being.

LTH-C COMPLICATIONS

OUTCOME: The patient/family will understand the effects and consequences possible as a result of hypothyroidism, failure to manage hypothyroidism, or as a result of treatment.

STANDARDS:

1. Discuss the significant complications associated with hypothyroidism (depression, excessive weight gain, high blood pressure, high cholesterol levels).
2. Discuss that full participation with the treatment regimen may prevent most or all significant complications.

LTH-DP DISEASE PROCESS

OUTCOME: The patient/family will have a basic understanding of the pathophysiology of hypothyroidism.

STANDARDS:

1. Explain that hypothyroidism occurs when the amount of thyroid hormone in the blood is too low. It affects almost 5% of the population. It is more common in women and in elderly persons.
2. Explain that hypothyroidism leads to an overall decrease in a person's metabolism, which can cause a number of problems.
3. Review the patient-specific cause and expected course of hypothyroidism. In most cases hypothyroidism is a permanent condition that requires life-long treatment with natural thyroid supplement.

4. Review the symptoms of hypothyroidism, which include feelings of:
 - a. Fatigue
 - b. Lack of motivation
 - c. Sleepiness
 - d. Weight gain
 - e. Feelings of being constantly cold
 - f. Constipation
 - g. Dry skin
 - h. Hair loss
 - i. Muscle cramps and muscle weakness
 - j. High blood pressure and high cholesterol levels
 - k. Depression
 - l. Slowed speech
 - m. Poor memory
 - n. Feelings of “being in a fog”

LTH-EX EXERCISE

OUTCOME: The patient/family/caregiver will understand the role of increased physical activity in this patient’s disease process and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Discuss medical clearance issues for physical activity.
2. Discuss the benefits of any exercise, such as improvement in well being, stress reduction, sleep, bowel regulation, and self image.
3. Assist the patient in developing a personal exercise plan. Explain that exercise should be consistent and of sufficient duration to obtain the desired outcome.
4. Encourage the patient to increase the intensity of the activity as the patient becomes more fit.
5. Discuss that in hypothyroidism, severe muscle weakness may occur and exercise tolerance is impaired. Explain that exercise is important not only for weight control, but also to reestablish muscle tone and fitness. In general, intense aerobic exercise should only be attempted after thyroid hormone levels have returned to normal. However, the patient can begin walking and modest weight-bearing exercise as treatment is initiated.
6. Refer to community resources as appropriate.

LTH-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the treatment of hypothyroidism.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments and that follow-up appointments should be kept.
3. Emphasize that full participation in the treatment plan is the responsibility of the patient/family.
4. Discuss signs/symptoms that should prompt immediate follow-up (both symptoms of hyperthyroidism and hypothyroidism).
5. Discuss the availability of community resources and support services and refer as appropriate.

LTH-L LITERATURE

OUTCOME: The patient/family will receive literature about hypothyroidism.

STANDARDS:

1. Provide the patient/family with literature on hypothyroidism.
2. Discuss the content of the literature.

LTH-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand the lifestyle adaptations necessary to maintain optimal health.

STANDARDS:

1. Emphasize that weight gain, high blood pressure, and high cholesterol levels are associated with hypothyroidism.
2. Explain that although most hypothyroid individuals will lose weight after they begin taking a thyroid supplement, significant weight loss will usually require attention to healthy eating habits and exercise. Individuals should avoid setting unrealistic goals.

LTH-M MEDICATIONS

OUTCOME: The patient/family will understand the purpose, proper use and expected outcomes of prescribed drug therapy.

STANDARDS:

1. Describe the name, strength, purpose, dosing directions, and storage of the medication.
2. Discuss the benefits and common or important side effects of the medication and follow up as appropriate.
3. Discuss any significant drug/drug, drug/food and alcohol interactions, as appropriate.
4. As appropriate, explain the implications that medications have on current or potential pregnancy.
5. Discuss the importance of keeping a list of all current prescriptions and over-the-counter medicines, vitamins, herbs, traditional remedies, and supplements. Encourage the patient to bring this list and pill bottles to appointments for medication reconciliation.

LTH-MNT MEDICAL NUTRITION THERAPY

OUTCOME: The patient and family will understand the specific nutritional intervention(s) needed for treatment or management of hypothyroidism.

STANDARDS:

1. Explain that Medical Nutrition Therapy (MNT) is a systematic nutrition care process provided by a Registered Dietitian (RD) that consists of the following:
 - a. Assessment of the nutrition related condition.
 - b. Identification of the patient's nutritional problem.
 - c. Specific nutrition intervention therapy plan.
 - d. Evaluation of the patient's nutritional care outcomes.
 - e. Reassessment as needed.
2. Review the basic nutrition recommendations for the treatment plan.
3. Discuss the benefits of nutrition and exercise to health and well-being.
4. Assist the patient/family in developing an appropriate nutrition care plan.
5. Refer to other providers or community resources as needed.

LTH-N NUTRITION

OUTCOME: The patient/family will understand the nutritional needs of the patient with hypothyroidism.

STANDARDS:

1. Review normal nutritional needs for optimal health.

2. Discuss the need for the correct combination of nutrients and vitamins, as well as the need for a low-fat diet.
3. Explain that the following foods may increase the risk of developing a goiter and must be limited: cabbage, Brussels sprouts, kale, cauliflower, asparagus, broccoli, soy beans, lettuce, peas, spinach, turnip greens and watercress.
4. Encourage the use of iodized salt if indicated and adequate fluid intake.
5. Explain that the long term use of soy protein products may be contraindicated. Refer to a registered dietician for MNT.

LTH-SCR SCREENING

OUTCOME: The patient/family will understand the screening device.

STANDARDS:

1. Explain the screening device to be used.
2. Explain why the screening is being performed.
3. Discuss how the results of the screening will be used.
4. Emphasize the importance of follow-up care.

LTH-TE TESTS

OUTCOME: The patient/family will understand the tests to be performed.

STANDARDS:

1. Explain the test ordered and collection method, e.g., TSH, T3, T4, nuclear scan, ultrasound, blood counts.
2. Explain the necessity, benefits, and risks of the test to be performed and how it relates to the course of treatment. Discuss the risks/benefits of non-testing.